

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Amended) A hybridization probe that comprises a DNA capable of specifically hybridizing to a target nucleotide sequence, and an additional nucleotide sequence comprising one or more nucleotides selected from the group consisting of labeled nucleotides, labeled nucleotide derivatives, unlabeled nucleotides, and unlabeled nucleotide derivatives, wherein the additional in which a nucleotide sequence comprising labeled nucleotides or nucleotide derivatives is added to a DNA to be labeled, the added nucleotide sequence

a) comprises at least one nucleotide or nucleotide derivative comprising nucleotides and/or nucleotide derivatives having weaker affinity of hydrogen bonding in base pairing with bases of the target nucleotide sequence when compared with ~~that~~ those of hydrogen bonding in an a/t pair, in an a/u pair, and in a g/c pair;

b) comprises either or both of at least one labeled nucleotide and labeled nucleotide derivative; and

c) is b) being introduced into the DNA to be labeled through nucleotide-adding reaction with terminal transferase.

2. (Original) The hybridization probe of claim 1, wherein the nucleotides of a) are inosinic acids.

3. (Amended) The hybridization probe of claim 2, wherein the additional added nucleotide sequence comprises labeled nucleotides or nucleotide derivatives and unlabeled inosinic acids or derivatives thereof.

4. (Original) The hybridization probe of claim 3, wherein the labeled nucleotides or nucleotide derivatives are labeled inosinic acids or inosinic acid derivatives.

5. (Amended) The hybridization probe of claim 1, wherein the additional ~~added~~ nucleotide sequence *per se* is incapable of hybridizing to any nucleotide sequence ~~sequences~~ under stringent hybridization conditions for the DNA ~~to be labeled~~.

6. Cancelled.

7. Cancelled.

8. Cancelled.

9. Cancelled.

10. Cancelled.

11. (Amended) A kit for synthesizing a hybridization probe, the kit comprising

i) nucleotides and/or nucleotide derivatives

(a) having weaker affinity of hydrogen bonding in base pairing ~~with bases of the target nucleotide sequence~~ when compared with those of hydrogen bonding in an a/t pair, in an a/u pair, and in a g/c pair; and

(b) being introduced into a DNA comprising a nucleotide sequence complementary to the target nucleotide sequence ~~to be labeled~~ through nucleotide-adding reaction with terminal transferase;

ii) labeled nucleotides or nucleotide derivatives; and

iii) terminal transferase.

12. Cancelled.

13. (New) A hybridization probe that comprises a DNA capable of specifically hybridizing to a target nucleotide sequence, and an additional nucleotide sequence comprising one or more nucleotides selected from the group consisting of labeled nucleotides, labeled nucleotide derivatives, and unlabeled nucleotide derivatives, wherein the additional nucleotide sequence

a) comprises at least one nucleotide derivative having weaker affinity of hydrogen bonding in base pairing with bases of the target nucleotide sequence when compared with that of hydrogen bonding in an a/t pair, in an a/u pair, and in a g/c pair;

b) comprises either or both of at least one labeled nucleotide and labeled nucleotide derivative; and

c) is introduced into the DNA to be labeled through nucleotide-adding reaction with terminal transferase.

14. (New) A kit for synthesizing a hybridization probe, the kit comprising

i) nucleotide derivatives

(a) having weaker affinity of hydrogen bonding in base pairing when compared with those of hydrogen bonding in an a/t pair, in an a/u pair, and in a g/c pair; and

(b) being introduced into a DNA comprising a nucleotide sequence complementary to the target nucleotide sequence through nucleotide-adding reaction with terminal transferase;

ii) labeled nucleotides or nucleotide derivatives; and

iii) terminal transferase.